Alameda Countywide
Clean Water Program
A Consortium of Local Agencies

Urban Runoff Pollution Prevention is Everybody's Business

In response to recent Federal and State water quality regulations and requirements, municipalities in Alameda County have joined to form the Alameda Countywide Clean Water Program (ACCWP).

The ACCWP *consists of the Cities of Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, Union City, Alameda County, the Alameda County Flood Control and Water Conservation District, and Zone 7 of the District.*

The Goal of the ACCWP *is to control discharges of pollutants to municipal storm drain systems (and local creeks and the San Francisco Bay). The ACCWP encourages using Best Management Practices to effectively eliminate illegal discharges and connections.*

The Storm Drain System *was built to collect and transport rain to prevent flooding in urban areas. Anything that flows or is discharged into the storm drain system goes directly into local creeks or San Francisco Bay without any treatment.*

The Sanitary Sewer System *collects and transports sanitary wastes from interior building plumbing systems to the wastewater treatment plant where the wastewater is treated.*

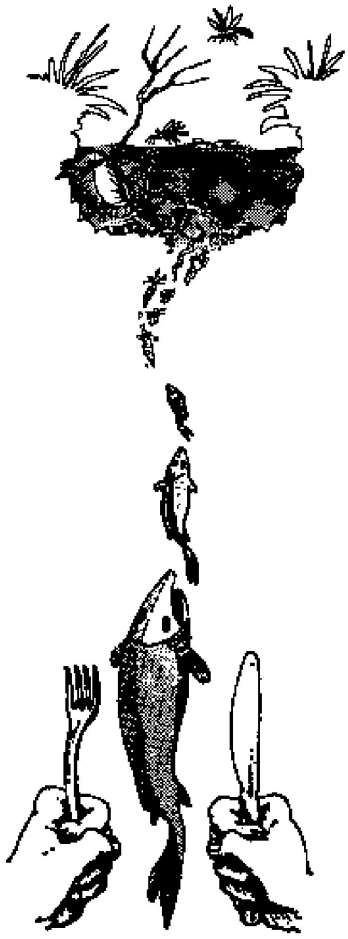
Best Management Practices (BMPs) *are methods and practices such as good housekeeping, spill prevention, or treatment measures to prevent or minimize pollutant discharges to municipal storm drain systems.*

Illegal Discharges or Illicit Connections *discharge non-storm water to municipal storm drain systems and contribute to water pollution.*

Urban Runoff *is rain and any other water that passes through and out of developed areas (streets, parking lots, roof tops, etc.) into the storm drain system and eventually to creeks and other waters.*

The next time you are caught outside in the rain, take a look at what is running off the street, into gutters, and down storm drain inlets. Clean rainwater can quickly be transformed into an oily, murky mixture. You are looking at a major cause of water pollution in local creeks and the San Francisco Bay: urban runoff.

Courtesy City of Bellevue
"Stream Team Guidebook"



The discharge of pollutants from urban runoff during storms is far greater than any other source. Over the course of each year, our community storm drains dump more lead, copper, zinc, and other toxic substances into the Bay than sewage treatment plants and industrial discharges combined. Other types of pollutants found in stormwater runoff include litter, food waste, automotive fluids, construction material, and yard waste. This pollution can harm fish, birds and other wildlife. It can degrade the whole web of life in the bay, including human life. We are part of the food chain too!

How do pollutants get into storm drains? Most are washed off streets, parking lots, and paved areas during storms. Others are deliberately drained or dumped into streets, gutters, and inlets. Some come from illicit connections to the storm drain system, and others are from materials that are spilled because of careless storage and handling practices.

The other side of this flyer describes specific ways that work activities cause stormwater pollution. If you have additional questions concerning urban runoff, call the City of Alameda stormwater representative at **510-749-5840.**

Major Causes of Urban Runoff Pollution

What day-to-day activities cause urban runoff pollution? Here are some of the biggest causes:

- ***Using automobiles.*** Particles in auto exhaust contain toxic organics and heavy metals. Dripping motor oil and wear from brake linings and tires deposit pollutants on streets and highways.

- ***Maintaining vehicles.*** Vehicle maintenance results in drips and spills of oil, coolant and other fluids. When performed outdoors, these fluids soak into asphalt and concrete pavements until they are washed away with the next storm. Water from washing vehicles outdoors carries pollutants directly to the nearest storm drain.

- ***Allowing drainage from the shop floor to flow outside.*** Allowing process or clean-up water to drain out onto the street is an often-seen practice that transports pollutants to the storm drain.

- ***Cleaning tools or equipment outdoors.*** Cleaning or rinsing containers, tools, floor mats or other items outdoors discharges pollutants such as chemicals, detergents, oils, etc.

- ***Dumping wastes.*** People looking for a "shortcut" to dispose of used oil, paint or other wastes dump them directly into storm drain inlets, causing pollution.

- ***Landscaping and grounds maintenance.*** Overuse, or indiscriminate use, of fertilizers and pesticides results in these materials running off landscaped areas into storm drains.

- ***Allowing dumpster areas to become untidy.*** Liquids that leak from dumpsters or garbage left outside the dumpster get washed away during a storm.

- ***Building or remodeling facilities.*** Disturbing soil and vegetation during construction greatly increases erosion; *sediment* is a pollutant. During construction, proper material handling and waste disposal is especially important because much of the work is performed outdoors.

Effects of urban runoff pollution

What are the consequences of these activities? The most immediate effects can be seen: many creeks have an oily sheen near storm drain outfalls, litter is left behind by receding waters after a storm, layers of oil-and-grease-laden sediments accumulate, and dead animals are occasionally found on beaches.

But the most serious effects are more subtle. Some toxic substances affect critical life stages of certain organisms. Even if we do not usually see, or think about, these organisms (such as algae or mussels) they are part of the food supply for other plants and animals, including fish and birds. Pollutants in the aquatic environment disrupt the food chain. Some toxins bioaccumulate, which means organisms further up the food chain will concentrate the toxins in their tissue. This is why the State Health Department has recommended restrictions on human consumption of some species of fish and birds found in the Bay. Other effects of urban runoff pollution include contamination of water supply sources and loss of recreational activities such as fishing, swimming, and boating.

People can still stop stormwater pollution because people cause it. By making small changes in the way we live and work, we can reduce the pollution we produce.